

DETAILED ACTION

- This action is responsive to the following communication: amendment after non-final action filed on 9/23/2011.
- Claims 9-19 are pending.

Response to Arguments

Applicant's amendments, filed 9/23/2011 have been entered and fully considered. However, in light of the applicant's amendments and arguments, the rejection(s) have been withdrawn. However, upon further consideration, a new ground(s) of rejection(s) have been made, and applicant's arguments have been rendered moot. Please claim rejections below for further details.

Examiner Notes

Examiner cites particular columns and line numbers in the references as applied to the claims below for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that, in preparing responses, the applicant fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 9 and 13-14 are rejected under 35 U.S.C. 103 as being unpatentable over Yoshida et al., US 6,388,759 in view of Suzuki, US 2003/0039481 further in view of Fukuda Motoyuki, JP 2002-023565 further in view of well known art further in view of Suga Junjiro, JP 04-191994.

Re claim 9, Yoshida et al. discloses an image processing apparatus (see figure 1) comprising: a plurality of input apparatuses (i.e. touch panel 111, keypad 112, see figure 2) (see column 9, lines 34-45), a setter (i.e. operation input unit, OP, see figure 2) that sets an operation of the processing apparatus in accordance with an input entered through an input operation performed on an input apparatus (i.e. keypad entry) among the plurality of input apparatuses (see column 9, lines 17-58; figure 2); Yoshida further discloses setting different automatic clear times based on plurality of input conditions performed by the user via a plurality of input apparatuses (see column 13, line 44-column 14, line 48).

Yoshida fails to explicitly disclose a plurality of input apparatuses, that are different from each other in operability in entering input for a same operation; a controller that determines an automatic-clear time for the input apparatus on which the input operation was performed based on the operability of the input apparatus, wherein a different automatic-clear time is determined for each of the plurality of input apparatuses, and if another input operation is not performed on the input apparatus

during the determined automatic-clear time, the controller executes an automatic-clear function to clear the set operation to an initially set default; wherein the plurality of input apparatuses includes at least one input apparatus that is suitable for use by a disabled person and another input apparatus that is suitable for use by an able-bodied person, the input apparatus that is suitable for use by a disabled person and the input apparatus that is suitable for use by an able-bodied person having different input mechanisms that accept different types of user inputs, and wherein the controller determines a longer automatic-clear time for the input apparatus that is suitable for use by a disabled person than for the input apparatus that is suitable for use by an able-bodied person.

Suzuki teaches an image processing apparatus (see figure 1) comprising: a plurality of input apparatuses (i.e. user interface units 300 & 400, see figure 1) that are different from each other in operability (paragraph 41) in entering input for a same operation (see figs. 4, 5 with text), a setter (keys 302-304, 402-404) that sets an operation of the processing apparatus in accordance with an input entered through an input operation performed on an input apparatus (i.e. keypad entry) among the plurality of input apparatuses (see figs. 4, 5 with text); wherein the plurality of input apparatuses includes at least one input apparatus (unit 400) that is suitable for use by a disabled person and another input apparatus (unit 300) that is suitable for use by an able-bodied person (paragraphs 35-45, figs. 4-5).

Suga teaches input apparatus (portable input device 19) that is suitable for use by a disabled person (handicapped person) and the input apparatus (main body 6 input apparatus) that is suitable for use by an able-bodied person (normal person) having

different input mechanisms (portable device 19 gets connected thru body jack 14 for handicapped person and has different mechanism/input mode than the main body 6 inputs) that accept different types of user inputs (portable device has different inputs (input key 15) compared to normal main body 6 inputs) (see abstract)

However, Fukuda et al. teaches image processing apparatus (copy machine, see paragraph 1) comprising: a plurality of input apparatuses (see paragraphs 15-16) that are different from each other in operability in entering input (Fukuda teaches various tabs which are related to different operating modes and are displayed on the display screen. The user uses a designated input apparatus that are different from each other in operability in entering input. For example, copy number of sheet tab is set by ten-key input apparatus which is different than LCD touch panel for entering input, see abstract, paragraphs 7-10, 21, 23, 26-34); and a controller (auto clear time decision means, see paragraph 5) that determines an automatic-clear time for the input apparatus on which the input operation was performed based on the operability of the input apparatus (see abstract, paragraphs 5, 7-14, 21, 23, 26-34, note that auto clear time for the input apparatus is determined based on the difficulty level of the setting operating mode in operation associated with the input apparatus. Note each operating mode has a difficulty level. As one non-limiting example, some modes are considered easy, therefore, the operating mode is set to low difficulty, each setting operating mode associated with each input apparatus has a different level of ease of use (difficulty level) and different auto clear times are determined according to the difficulty level of the setting operating modes in operation associated with each input apparatuses. Further

note that a longer automatic-clear time is set for setting operating mode with higher difficulty level associated with an input apparatus), wherein a different automatic-clear time is determined for each of the plurality of input apparatuses (see paragraphs 5, 7-14, 21, 23, 26-34, note that each setting operating mode associated with the input apparatus has a different level of ease of use (difficulty level) and different auto clear times are determined based on the difficulty level of the setting operating modes in operation associated with the input apparatuses), and if another input operation is not performed on the input apparatus during the determined automatic-clear time, the controller executes an automatic-clear function to clear the set operation to an initially set default (see paragraphs 5-6); wherein the controller determines a longer automatic-clear time for input apparatus that is suitable/associated with higher difficulty operating mode than for input apparatus that is suitable/associated with lower difficulty operating mode (see paragraphs 5, 7-14, 21, 23, 26-34, note that each operating mode has a difficulty level and auto clear times for the input apparatuses are determined based on the difficulty level of the setting operating mode in operation suitable/associated with the kind of input apparatus. As one non-limiting example, some modes are considered easy, therefore, the operating mode is set to low difficulty, each setting operating mode associated with each input apparatus has a different level of ease of use (difficulty level) and different auto clear times are determined according to the difficulty level of the setting operating modes in operation associated with each kind of input apparatuses. Further note that a longer automatic-clear time is set for setting operating mode with higher difficulty level associated with an input apparatus than for input apparatus that is

suitable/associated with lower difficulty operating mode. Thus, different auto clear times are determined based on the difficulty level of the setting operating modes in operation associated with the input apparatuses). However, Official Notice is taken to note that for a disabled person or a person on wheelchair to take longer time for entering inputs for a same operation than an able-bodied person is notoriously well known. It would have been obvious for a controller to determine/assign in the system of Fukuda, the setting operating mode associated with input apparatus unit 400 or portable device 19 that is suitable for use by a disabled person as taught by Suzuki and Suga, with a higher difficulty level, thus, giving it a longer automatic clear time as compared to the setting operating mode (lower difficulty level) associated with input apparatus unit 300 or main body 6 apparatus that is suitable for use by an able-bodied person (shorter automatic clear time) for the benefit of providing adequate input time and improvements in the facility with which a child or a person in a sitting posture using a wheelchair or the like operates the machine as taught by Suzuki at paragraph 40 and to enable convenient inputs to be performed by a handicapped person as taught by Suga in abstract.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention to modify the image forming apparatus as disclosed by Yoshida to include the plurality of different input apparatuses as taught by Suzuki and Suga, and automatic clearing time determination means as taught by Fukuda et al. for the benefit of providing improvements in the facility with which a child or a person in a sitting posture using a wheelchair or the like operates the machine as taught by Suzuki at paragraph 40 and to enable convenient inputs to be performed by a handicapped

person as taught by Suga in abstract and for providing longer time for difficult operation modes associated with input apparatus versus easy operation modes in order to give the user increased flexibility and adequate time for entering inputs as taught by Fukuda in abstract.

Re claim 13, Yoshida et al. fails to further disclose a table storing data of automatic-clear times respectively corresponding to the plurality of input apparatuses, wherein the controller reads data of an automatic-clear time corresponding to the input apparatus on which the input operation was performed, and determines the automatic-clear time of the read data as the automatic-clear time for the input apparatus.

However, Fukuda et al. discloses a table (see tables 1-7) storing data of automatic-clear times (see table 1-7) respectively corresponding to the plurality of input apparatuses (touch panel, key pad, see paragraphs 15-16) (see abstract; paragraphs 21, 23, 26-34, note that different auto clearing times are stored in tables 1-7 according to difficulty level of setting operating modes associated with the plurality of input apparatuses), wherein the controller (control means) reads data of an automatic-clear time corresponding to the input apparatus on which the input operation was performed, and determines the automatic-clear time of the read data as the automatic-clear time for the input apparatus (see paragraphs 5, 7-14, 21, 23, 26-34 and explanation given above for claim 1).

Re claim 14, Yoshida et al. fails to further disclose wherein the data stored in the table can be rewritten.

However, Fukuda et al. discloses wherein the data stored in the table can be rewritten (see paragraphs 21, 23, 26-34, note that the user can set the desired auto clear times and depending upon difficulty level of the operating mode in operation, the auto clear times are determined and are written onto table and stored into RAM, hence it is apparent that the user can change/set (rewrite) a suitable data into RAM according to his/her choices of selecting the desired operating mode).

3. Claims 10-12, and 16 are rejected under 35 U.S.C. 103 as being unpatentable over Yoshida et al., US 6,388,759 in view of Suzuki, US 2003/0039481 further in view of Fukuda Motoyuki, JP 2002-023565 further in view of well known art further in view of Hirota et al., US 5,546,166 further in view of Suga Junjiro, JP 04-191994.

Re claim 10, Yoshida et al. fails to further disclose a receiver that receives an extension request entered by a user to extend the determined automatic-clear time, wherein the controller extends the determined automatic-clear time after the receiver receives the extension request.

However, Hirota teaches a receiver (see figure 1) that receives an extension request (depression of guidance key 2) entered by a user to extend the determined automatic-clear time (longer auto clear time) (see column 4, line 34-column 5, line 65), wherein the controller (CPU, which controls the auto clear subroutine) extends the determined automatic-clear time (sets the longer auto clear time, timer T2) after the receiver receives the extension request (see column 4, line 34-column 5, line 65).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention to modify the image forming apparatus as disclosed by Yoshida to include the auto clear functionality as taught by Hirota et al. for the benefit of providing *“an image forming apparatus capable of alerting an operator of the timing for the operation of the auto-clear function which automatically returns the copy conditions to the standard copy conditions after completion of a copy operation, or within a predetermined time period following any key operation”* as taught by Hirota at column 2, lines 5-16.

Re claim 11, Yoshida et al. discloses an identifying unit (Operational Panel, OP) that identifies the input apparatus (see figure 2) on which the input operation was performed (depression of a particular key on the key pad, fig. 2), wherein the controller (CPU) identifies (recognizes) the input apparatus (particular key selection) from a result of the identification (whether the copy mode or facsimile mode is selected) by the identifying unit (see column 9, line 17-column 12, line 58).

Re claim 12, Yoshida et al. further discloses wherein the input apparatus (see figure 2) transmits, to the identifying unit (OP), identification information that identifies the input apparatus on which the input operation was performed (see column 9, lines 17-56, note that the OP recognizes (identifies) the identification information (copy or fax mode selection) that identifies the input apparatus (the key pad, fig. 2) on which the input operation was performed (whether the copy or fax mode was selected via performing operations on the key pad), and the identifying unit (OP) identifies (recognizes) the input apparatus based on the identification information (detection

information regarding selection of copy or fax mode) transmitted from the input apparatus (operations performed on the key pad, fig. 2) (see column 9, line 17-column 10, line 57).

Re claim 16, Yoshida et al. further discloses wherein the controller (CPU) determines an automatic-clear time (auto-clearing operating time) for an object input apparatus (ADF) in a manner where the longer an interval between input operations in the object input apparatus is expected to be (manual placement of the originals in ADF), the longer the automatic-clear time determined for the object input apparatus is (T2 is longer than the T1) (see column 13, line 60-column 14, line 48).

(Note that Hirota also discloses the controller (CPU) determines an automatic-clear time for an object input apparatus in a manner where the longer an interval between input operations in the object input apparatus is expected to be (if the user needs longer time to read and understand the methods for setting the copy functions in between input operations, see column 1, lines 30-67), the longer the automatic-clear time determined for the object input apparatus is (Timer T2) (column 3, line 35-column 5, line 65, note that Timer T2 is assigned, which is longer than normal auto clear time is assigned by the controller upon the request of the user).

4. Claims 15 and 17-19 are rejected under 35 U.S.C. 103 as being unpatentable over Yoshida et al., US 6,388,759 in view of Suzuki, US 2003/0039481 further in view of Fukuda Motoyuki, JP 2002-023565 further in view of Hirota et al., US

5,546,166 further in view of well-known art further in view of Suga Junjiro, JP 04-191994.

Re claim 15, Fukuda teaches the controller determines a longer automatic-clear time for setting operating mode with higher difficulty level associated with an input apparatus (see paragraphs 7-14, 21, 23, 26-34). Fukuda further teaches that each setting operating mode associated with the input apparatus has a different level of ease of use (difficulty level) and different auto clear times are determined based on the difficulty level of the setting operating modes in operation associated with the input apparatuses.

However, Official Notice is taken to note that ability to provide a longer auto clear time for a particular apparatus versus other is notoriously well known and commonly used in the art. It would have been obvious to provide a longer automatic-clear time for an input apparatus that is universal-design-compliant (if the difficulty level of its setting operating modes associated with universal-design-compliant input apparatus is higher) than for an input apparatus that is not universal-design-compliant for the benefit of providing the user with adequate time to enter desired input settings and for providing increased user flexibility.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention to modify the image forming apparatus as disclosed by Yoshida to include the plurality of different input apparatuses as taught by Suzuki and Suga, and automatic clearing time determination means as taught by Fukuda et al. for the benefit of providing improvements in the facility with which a child or a person in a sitting

posture using a wheelchair or the like operates the machine as taught by Suzuki at paragraph 40 and to enable convenient inputs to be performed by a handicapped person as taught by Suga in abstract and for providing longer time for difficult operation modes associated with input apparatus versus easy operation modes in order to give the user increased flexibility and adequate time for entering inputs as taught by Fukuda in abstract and to include the auto clear functionality as taught by Hirota et al. for the benefit of providing *"an image forming apparatus capable of alerting an operator of the timing for the operation of the auto-clear function which automatically returns the copy conditions to the standard copy conditions after completion of a copy operation, or within a predetermined time period following any key operation"* as taught by Hirota at column 2, lines 5-16.

Re claim 17, Yoshida et al. fails to further disclose wherein at least one of the plurality of input apparatuses is connected to the image processing apparatus via a network. However, Official Notice is taken to note that ability to have least one of the plurality of input apparatuses (i.e. keyboard) is connected to the image processing apparatus (i.e. copying machine) via a PC on the network is notoriously well known and commonly used in the art. It would have been obvious to have a keyboard connected to a PC, which is connected to the image processing apparatus of Yoshida for the benefit of enabling the user to provide further interactive input, and for increased user flexibility and options.

Re claim 18, Yoshida et al. fails to further disclose at least one of the plurality of input apparatuses is connected to a terminal apparatus that is connected to the image

processing apparatus via a network. However, Official Notice is taken to note that ability to have least one of the plurality of input apparatuses (i.e. keyboard) is connected to a terminal apparatus (i.e. PC) that is connected to the image processing apparatus (i.e. copying machine) via a network is notoriously well known and commonly used in the art. It would have been obvious to have a keyboard connected to a PC, which is connected to the image processing apparatus of Yoshida for the benefit of enabling the user to provide further interactive input, and for increased user flexibility and options.

Re claim 19, Yoshida et al. fails to further disclose after executing the automatic-clear function, the controller notifies the terminal apparatus of a fact that the controller has executed the automatic-clear function. However, Official Notice is taken to note that ability to have the image processing apparatus (copying machine or printer) notifying the PC with an updated status corresponding to an operation performed by it that whether the printing has finished successfully or if an error has occurred (i.e. paper jam, out of paper) is notoriously well known and commonly used in the art. It would have been obvious to have image processing apparatus of Yoshida to notify the PC of its current status after performing an operation like auto-clear for the benefit of providing the user with increased flexibility, options, convenience, and efficient status updating system.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAWANDEEP DHINGRA whose telephone number is (571)270-1231. The examiner can normally be reached on M-F, 9:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on (571) 272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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